

MATH 3243, Advanced Calculus, Fall 2016

Section: 01W, Discipline Specific Writing (DSW) course

Credit Hours: 3 hours

Room and Hours: Boyd 302: TR, 9:30 am – 10:45 am

Prerequisite: MATH 3003 with C or better

Instructor: Dr. Kwang Shin

Office Hours: TR (10:50 am – 1:50 pm), F (2:00 pm – 3:00 pm) or by appointment.

Office: 311 Boyd **Phone:** 678-839-4138

E-mail: kshin@westga.edu through your campus e-mail (myUWG).

Course Webpage: <http://www.westga.edu/~kshin/3243/> (Under construction)

Course Description: This course is a rigorous introduction to the fundamental concepts of single-variable calculus. Topics include the real numbers, limits, continuity, uniform continuity, differentiation, integration, and sequences and series.

Text: *Elementary Real Analysis*, 1st edition by Brian Thompson, Judith Bruckner, and Andrew Bruckner.

Learning Outcomes: Students should be able to

1. Use properties of real numbers to prove theorems about their structures,
2. Use the definition of limit to prove convergence of sequences, series, and functions,
3. Use the definition of continuity to prove properties of continuous functions,
4. Use the definition of differentiability to prove properties of differentiable functions,
5. Use the definition of Riemann integral to prove properties of integrals.

Hour Exams: Exam 1 (Thur., Sep 15), Exam 2 (Tue., Oct 18), Exam 3 (Thur., Nov 17).

Final Exam: Thursday, Dec. 8, 8:00-10:00 am. The final exam will be cumulative.

DSW Homework: The homework includes the writing of proofs as part of discipline specific writing. The total homework score will be converted to a 200 point scale at the end of semester.

Grade Scale:

3 Exams	300 points (100 points each)
DSW Homework	200 points
Final	200 points

Total	700 points

A: 90% or better, B: 80%--89%, C: 70% – 79%, D: 60% -- 69%, F: 0% – 59%

Between August 12 and September 30, you can withdraw from a class with a grade of W.

Attendance and Pop-up Quizzes: Attendance is required and expected. Students are responsible for all material covered in class and all announcements made. An undetermined number of pop-up quizzes may be given for extra points. Such a quiz will consist of one problem, discussed during the same class.

Starting from the 5th unexcused absence, each absence leads to one-half percent deduction from the final grade. It will count as absent if you are not present when the attendance is checked.

Make-up: In general, make-up exams will *not* be given *after* the scheduled exam date. There will be no make-up final except when a conflict with other finals occurs. If a conflict occurs to you, please inform the instructor at least two weeks in advance. Make-up hour exams will be granted for official university activities if the student notifies the instructor at least a week in advance and for well-documented illness.

Classroom Behavior: You are expected not to disturb your classmate's learning. No phone or computer use during class without instructor's permission.

Also, please carefully review the following information at <http://www.westga.edu/UWGSyllabusPolicies/> or http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf. It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.